

### **REMARKS**

Claims 1 and 3-12 are pending. No amendments have been made, and thus, no new matter has been added.

In view of the previously filed Reply of July 17, 2009 along with the following remarks, the Examiner is respectfully requested to withdraw all rejections and allow the currently pending claims.

### **Issue under 35 U.S.C. § 103(a)**

The Examiner has rejected claims 1-6 under 35 U.S.C. § 103(a) as being obvious over Takahashi et al., U.S. Publication No. 2002/0001659 (hereinafter referred to as Takahashi '659) in view of Krawczyk, USP 6,025,007 (hereinafter referred to as Krawczyk '007). This rejection is respectfully traversed.

### **The Present Invention and its Advantages**

Claim 1 of the present invention is directed to a composition for a deep-fried food comprising: a polysaccharide powder having an average particle size of 20  $\mu\text{m}$  or less, wherein the polysaccharide is selected from the group consisting of guar gum, pectin, xanthane gum, alginic acid and carboxymethyl cellulose, and the polysaccharide powder is obtained by subjecting a polysaccharide to jet pulverization or freeze pulverization.

In the deep-fried food field, a large amount of oil adsorption can occur during frying. Also, due to this oil adsorption, mouth feeling and taste are lowered and health is negatively influenced. Thus, oil absorption in deep-fried foods should be necessarily controlled. In other words, low oil adsorption is important in deep-fried foods. For this, the present inventors have presented the solution by providing a pulverized polysaccharide powder having an average particle size of 20  $\mu\text{m}$  or less. When using such a powder, oil adsorption in deep-fried foods during cooking is remarkably controlled. This effect is proven by the Declaration submitted on July 17, 2009, wherein the present polysaccharide powder having an average particle size of 20

µm or less under pulverization reveals unexpectedly superior results, i.e., low oil adsorption (see also Table 1 of the present specification). Also, this effect of the present invention is evidenced by the currently attached Declaration, wherein the present invention using alginic acid shows unexpectedly superior results compared to the cited art using alginic ester.

*Distinctions over the Primary Reference of Takahashi '659*

In this Supplemental Reply, Applicants focus on a comparison between the closest teaching of Takahashi '659 and the present invention. The attached Declaration proves that the present deep-fried food using a pulverized alginic acid powder shows unexpectedly superior effects as compared to alginic acid ester of the prior art in terms of oil content, mouthfeel and taste.

Takahashi '659 relates to an oil absorption retarder. As main component of the retarder, Takahashi '659 uses alginic ester. See paragraphs [0009]-[0016] and Examples 3, 5 and 6 of Takahashi '659. Although Takahashi '675 discloses that addition of polysaccharide is allowed wherein polysaccharide includes alginic acid, sodium alginate, pectin, CMC, carrageenan, guar gum, ...., such polysaccharides are merely suggested. In fact, the Examples of Takahashi '675 do not include such polysaccharides in the retarder. Thus, Takahashi '659 focuses on "alginic ester" as a retarder.

In the current Declaration, powders of alginic acid (the present invention, hereinafter "Powder A" or "Product A") and alginic acid ester (Takahashi '659, hereinafter "Powder A" or "Product AE") were prepared in accordance with Example 3 of the present specification. Then, using Powder A, Product A (doughnut) was prepared and using Powder AE, Product AE (doughnut) was prepared. See pages 2-3 of the Declaration.

With Product A and Product AE, one of the present inventors, whose name is Hiromichi Kouno, conducted an evaluation according to Test Example 1 of the present specification.

First, the oil absorption of the dough was evaluated by determining the oil content in the obtained doughnut (% by weight). Product A, using polysaccharide of the present

invention (i.e., alginic acid) showed a 12.8% oil content. In contrast, Product AE, using the alginic ester of Takahashi '659, showed a 20.2% oil content. It is evident that the oil content of Product A of the present invention was significantly lower than Product AE, corresponding to Takahashi '659. Based on this evidence, the alginic acid of the present invention exhibits superior effects in view of oil absorption.

Second, the mouthfeel and taste were evaluated by 20 panelists. In the evaluation, points were awarded as shown in the following Table:

<b>Mouthfeel and Taste</b>	<b>Points</b>
Highly Excellent	10
Notably Excellent	9
Excellent	8
Fair	7
Somewhat Poor	6
Notably Poor	5
Very poor	4

Product A using the alginic acid of the present invention was awarded superior points for mouthfeel (9.2) and taste (8.5) as compared to Product AE using alginic ester of Takahashi '659, which was awarded mouthfeel (6.5) and taste (6.2). Based on this evidence, the alginic acid of the present invention exhibits superior effects in view of mouthfeel and taste as compared to Takahashi '659.

Consequently, the current Rule 132 Declaration shows that the claimed polysaccharide leads to unexpected and superior results, which is objective advantageous evidence of the non-obviousness of the present invention. Therefore, reconsideration and withdrawal of the 103(a) rejection are respectfully requested.

**Conclusion**

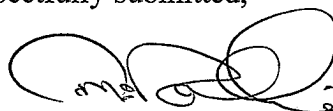
In view of the above remarks and the previous filed Reply, Applicants believe the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Craig A. McRobbie Reg. No. 42,874 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,



By \_\_\_\_\_  
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Attachment: Declaration under C.F.R. 1.132